

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Cancelled)
2. (Cancelled)
3. (Currently amended) A titanium binding peptide ~~comprising an~~ consisting of the amino acid sequence of SEQ ID NO: 1.
4. (Cancelled)
5. (Cancelled)
6. (Currently amended) A titanium binding peptide ~~comprising an~~ consisting of the amino acid sequence of SEQ ID NO: 2.
7. (Currently amended) A titanium binding peptide comprising [[an]] the amino acid sequence of SEQ ID NO: 3.
8. (Cancelled)
9. (Cancelled)
10. (Previously presented) A titanium binding peptide comprising any one of the amino acid sequences of SEQ ID NOs: 4 to 14.
11. (Currently amended) A titanium binding peptide comprising [[an]] the amino acid sequence of SEQ ID NO: 15.

12. (Previously presented) A titanium binding peptide comprising any one of the amino acid sequences of SEQ ID NOs: 16 to 24.
13. (Cancelled)
14. (Previously presented) A titanium binding peptide comprising any one of the amino acid sequences of SEQ ID NOs: 25 to 38.
15. (Cancelled)
16. (Previously presented) The titanium binding peptide according to claim 3, being chemically modified.
17. (Previously presented) The titanium binding peptide according to claim 3, wherein titanium is a metal titanium, a titanium alloy or a titanium dioxide.
18. (Previously presented) A titanium-peptide complex, wherein the titanium binding peptide according to claim 3 is bound to titanium.
19. (Currently amended) An artificial titanium binding protein comprising the titanium binding peptide according to claim 3 conjugated, with a functional peptide or a functional protein, wherein the functional protein is ferritin.
20. (Original) The artificial protein according to claim 19, wherein the functional peptide or the functional protein is a peptide or a protein that cooperates with a titanium binding peptide to form a two-dimensional crystalline by self-assembly.
21. (Original) The artificial protein according to claim 19, wherein the functional peptide or the functional protein is a peptide or a protein comprising a peptide sequence having a cell-recognizing ability such as cell adhesion ability.
22. (Previously presented) A titanium-artificial protein complex, wherein the artificial protein according to claim 19 is bound to titanium.

23. (Currently amended) A titanium binding chimeric protein comprising the titanium binding peptide according to claim 3 conjugated, with a labeled substance, a peptide tag, or a nonpeptide compound, wherein the nonpeptide compound is an antibiotic, a fluorescein, a rhodamine, polystyrene, polypropylene, polyethylene, a glass bead, a silicagel, a polysaccharide, a polysaccharide derivative, or a polyalkylene glycol.
24. (Original) A titanium-chimeric protein complex, wherein the chimeric protein according to claim 23 is bound to titanium.
25. (Previously presented) A titanium binding phage expressing the titanium binding peptide according to claim 3 on the particle surface.
26. (Original) A titanium-phage complex, wherein the phage according to claim 25 is bound to titanium.
27. (Cancelled)
28. (Cancelled)
29. (Cancelled)
30. (Cancelled)
31. (Original) An implant material comprising the titanium-artificial protein complex according to claim 22 as an active ingredient.
32. (Currently amended) A silver binding peptide comprising an consisting of the amino acid sequence of SEQ ID NO: 1.
33. (Cancelled)
34. (Cancelled)
35. (Currently amended) A silver binding peptide comprising an consisting of the amino acid sequence of SEQ ID NO: 2.

36. (Currently amended) A silver binding peptide comprising [[an]] the amino acid sequence of SEQ ID NO: 3.
37. (Cancelled)
38. (Previously presented) The silver binding peptide according to claim 32, 35 or 36, being chemically modified.
39. (Previously presented) A silver-peptide complex, wherein the silver binding peptide according to claim 32, 35 or 36 is bound to silver.
40. (Currently amended) A silver binding artificial protein comprising the silver binding peptide according to claim 32, 35 or 36 conjugated with a functional peptide or a functional protein, wherein the functional protein is ferritin.
41. (Original) A silver-artificial protein complex, wherein the artificial protein according to claim 40 is bound to silver.
42. (Currently amended) A silver binding chimeric protein comprising the silver binding peptide according to claim 32, 35 or 36 conjugated with a labeled substance, a peptide tag, or a nonpeptide compound, wherein the nonpeptide compound is an antibiotic, a fluorescein, a rhodamine, polystyrene, polypropylene, polyethylene, a glass bead, a silicagel, a polysaccharide, a polysaccharide derivative, or a polyalkylene glycol.
43. (Original) A silver-chimeric protein complex, wherein the chimeric protein according to claim 42 is bound to silver.
44. (Previously presented) A silver binding phage expressing the silver binding peptide according to claim 32, 35 or 36 on the particle surface.
45. (Original) A silver-phage complex, wherein the phage according to claim 44 is bound to silver.
46. (Cancelled)

- 47. (Cancelled)
- 48. (Cancelled)
- 49. (Cancelled)
- 50. (Currently amended) A silicon binding peptide ~~comprising an~~ consisting of the amino acid sequence of SEQ ID NO: 1.
- 51. (Cancelled)
- 52. (Cancelled)
- 53. (Currently amended) A silicon binding peptide ~~comprising an~~ consisting of the amino acid sequence of SEQ ID NO: 2.
- 54. (Currently amended) A silicon binding peptide comprising [[an]] the amino acid sequence of SEQ ID NO: 3.
- 55. (Cancelled)
- 56. (Previously presented) The silicon binding peptide according to claim 50, 53 or 54, being chemically modified.
- 57. (Previously presented) A silicon-peptide complex, wherein the silicon binding peptide according to claim 50, 53 or 54 is bound to silicon.
- 58. (Currently amended) A silicon binding artificial protein comprising the silicon binding peptide according to claim 50, 53 or 54 conjugated with a functional peptide or a functional protein, wherein the functional protein is ferritin.
- 59. (Original) A silicon-artificial protein complex, wherein the artificial protein according to claim 58 is bound to silicon.
- 60. (Currently amended) A silicon binding chimeric protein comprising the silicon binding peptide according to claim 50, 53 or 54 conjugated, with a labeled substance, a peptide-

tag, or a nonpeptide compound, wherein the nonpeptide compound is an antibiotic, a fluorescein, a rhodamine, polystyrene, polypropylene, polyethylene, a glass bead, a silicagel, a polysaccharide, a polysaccharide derivative, or a polyalkylene glycol.

61. (Original) A silicon-chimeric protein complex wherein the chimeric protein according to claim 60 is bound to silicon.
62. (Previously presented) A silicon binding phage expressing the silicon binding peptide according to claim 50, 53 or 54 on the particle surface.
63. (Original) A silicon-phage complex, wherein the phage according to claim 62 is bound to silicon.

64.-69. (Cancelled)